

Title (en)

Water-based fluorine-containing paint

Title (de)

Wässrige, fluorhaltige Anstrichzusammensetzung

Title (fr)

Peinture aqueuse contenant du fluor

Publication

EP 0743347 A2 19961120 (EN)

Application

EP 96107804 A 19960515

Priority

- JP 11598795 A 19950515
- JP 13031095 A 19950529

Abstract (en)

The invention provides a first water-based fluorine-containing paint including a water-based emulsion containing a fluorine-containing copolymer dispersed therein, and 1-50 parts by weight of a hardener per 100 parts by weight of the copolymer. The copolymer is prepared by copolymerizing 30-65 mol% of a fluoroolefin, 14-69 mol% of a copolymerizable vinyl-containing compound, and 1-30 mol % of a hydroxyl-containing compound and/or a polymerizable carboxyl-containing compound. The hardener is prepared by mixing 1 part by weight of a self-emulsifiable polyisocyanate with 0.01-1 part by weight of a compound containing in the molecule an oxyethylene unit and an alkoxy silyl group. When mixed with the emulsion, the hardener becomes well dispersed therein. The invention further provides a second water-based fluorine-containing paint including a water-based emulsion containing a fluorine-containing copolymer dispersed therein, and a hardener which is a compound containing in the molecule at least two hydrazino groups. The fluorine-containing copolymer is prepared by emulsion polymerization of 30-65 mol% of a fluoroolefin, 0.1-20 mol% of a polymerizable unsaturated carboxylic acid, 1-30 mol% of a polymerizable acetoacetylallyl compound, and 20-65 mol% of one of a vinyl ester and a vinyl ether. The second paint does not cure at ambient temperature, even after the hardener has been added thereto, and thus is usable as a one-package paint.

IPC 1-7

C09D 127/12; C08K 5/24

IPC 8 full level

C08G 18/62 (2006.01); **C08G 18/70** (2006.01); **C08G 18/71** (2006.01); **C09D 127/12** (2006.01); **C08L 75/04** (2006.01)

CPC (source: EP US)

C08G 18/6279 (2013.01 - EP US); **C08G 18/706** (2013.01 - EP US); **C08G 18/718** (2013.01 - EP US); **C09D 127/12** (2013.01 - EP US); **C08L 75/04** (2013.01 - EP US)

Cited by

US6153697A; EP2065452A4; EP2963091A1; WO03051988A3; WO9947616A1; US6833403B1; US7358296B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0743347 A2 19961120; EP 0743347 A3 19980429; EP 0743347 B1 20011205; DE 69617525 D1 20020117; DE 69617525 T2 20020502; EP 1123943 A1 20010816; US 5856394 A 19990105; US 6174955 B1 20010116

DOCDB simple family (application)

EP 96107804 A 19960515; DE 69617525 T 19960515; EP 01109532 A 19960515; US 13927298 A 19980825; US 64785396 A 19960515